

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY



AC INDUCTION MOTOR DATA SHEET

IEEE841 TYPE

Catalog No.	IEEE200-18-447TCRD	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	447TC	Rated Output	150 kW	200 HP		
Type	PJP	Number of Poles	4			
Enclosure(Protection)	Totally Enclosed / IP55	Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)	Starting Method*	D.O.L			
Rated Frequency	60 Hz	Rated Voltage	575 V	460 V	230 V	
Number of Phases	3	Current	Full Load	177.9 A	222.4 A	
Insulation Class	F		Locked-rotor**	700 %	700 %	700 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		93.2 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		95.2 %		
Altitude	Less than 1,000 meter	100% Load		96.2 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.730		
Duty Type	Continuous (S1)	75% Load		0.830		
Service Factor	1.15	100% Load		0.880		
Mounting	B5	Speed at Full Load		1785 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	6318C3 / 6316C3				
	Lubricant	Grease(Polyrex-EM)				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque				
Shaft Extension	Single	Full Load		592.0 lb.ft		
Terminal Box	Main	Locked-rotor**		140 %		
	Aux.	Breakdown**		220 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		2,307.790 lb.ft2		
Area classification	Hazardous	Motor		73.030 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	IEEE841, NEMA MG1, CSA C390			85 dB(A)		
ACCESSORIES		SUBMITTAL DRAWING				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B5	LM-I1447C5PL001	2020 lb.		
		REMARK				
		1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & F Temperature rise -. 10:1 VT (20:1 VT at 50% load) -. 10:1 CT -. CHP up to 1.5 times base speed, NEMA MG1 Part31 3. CSA Certification -. Class I, Division 2, Group A, B, C & D -. Class II, Division 2 Group E, F & G (Group E : up to 320Fr.) 4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power. 5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.				
SPARE PARTS		Date	DSND	CHKD	CHKD	APPD
		2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim

[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be done according to maker standard, if not mentioned.
 * In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.
 ** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

1	2	3	4
REV	DATE	CONTENTS	REVD BY

4.72

200HP	4P	460V	Cat. No.	IEEE200-18-447TCRD				
Model	HLS447PR04		INS. Class	F	HD-F1	Amps	222.4	
Type	HLS	Duty	CONT	Code	G	Amb.	40°C	
Frame	447TC	Encl.	TEFC	S.F.	1.15	RPM	1785	
Bearing	Drive	6318C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	95.2%	
	Opp.	6316C3				NEMA Design	B	
Usable at	50Hz 200HP 380V 270A 1480rpm S.F.: 1.0 Eff.: 95.6% Code: E							
	50Hz 200HP 400/415V 257.1/249.3A 1482/1484rpm S.F.: 1.0 Eff.: 95.9/96% Code: F/G							
CSA Certified for	Model	LATER		Type	PJP			
	CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC	CLASS II, Div. 2, Gr. E, F & G (Gr. E : Up to 320FR)		Temp. Code (sine wave)	Frame	140~320FR	360~400FR	440FR
		Amb. 40°C	T3C (160°C)		T3B (165°C)	T3A (180°C)		
Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)					
No.	-		Date	-		Weight	2020 lb	

IEEE Std 841-2021

4M-135701

MARINE DUTY IEEE45

Made in Korea H1

2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			



REF. NO	4M-135701	Sheet No.	of
DWG NO	NP-IEEE200-18-447TCRD	Revision No.	0



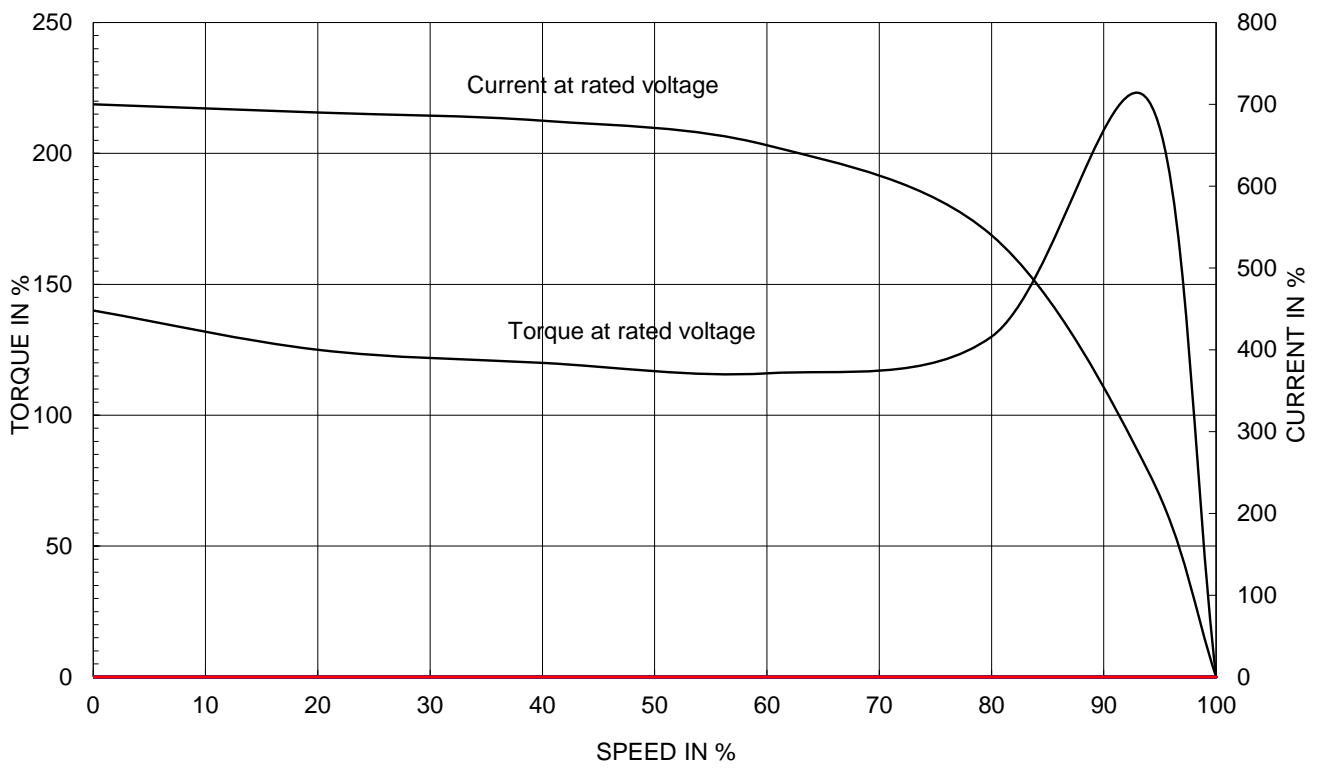
PERFORMANCE CURVE

CURVE NO.
PC-IEEE200-18-447TCRD

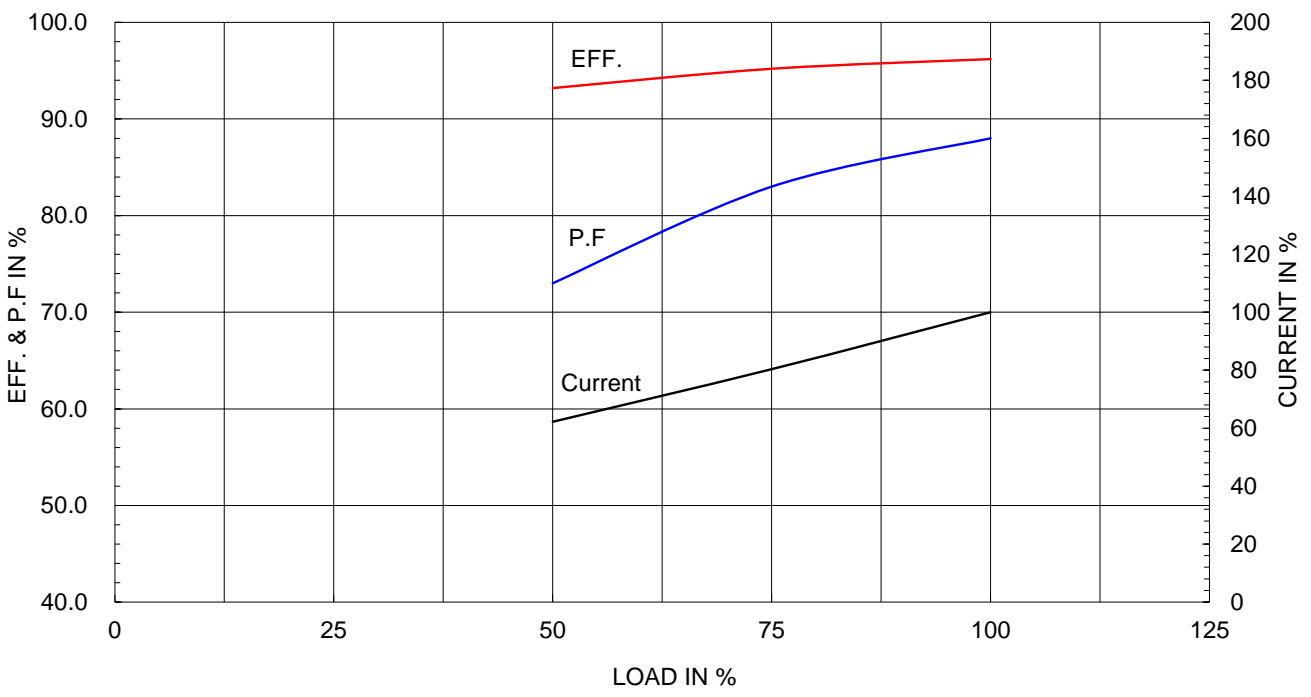
Type :	PJP	
Full Load Torque :	592.0	lb.ft
Load moment of Inertia (J) :	2307.790	lb.ft2
Motor moment of Inertia (J) :	73.030	lb.ft2

150kW	200HP	4 P	60 Hz
Speed at Full Load :			1785 RPM
Rated Voltage	575V	460V	230V
Full Load Current	177.9A	222.4A	444.8A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

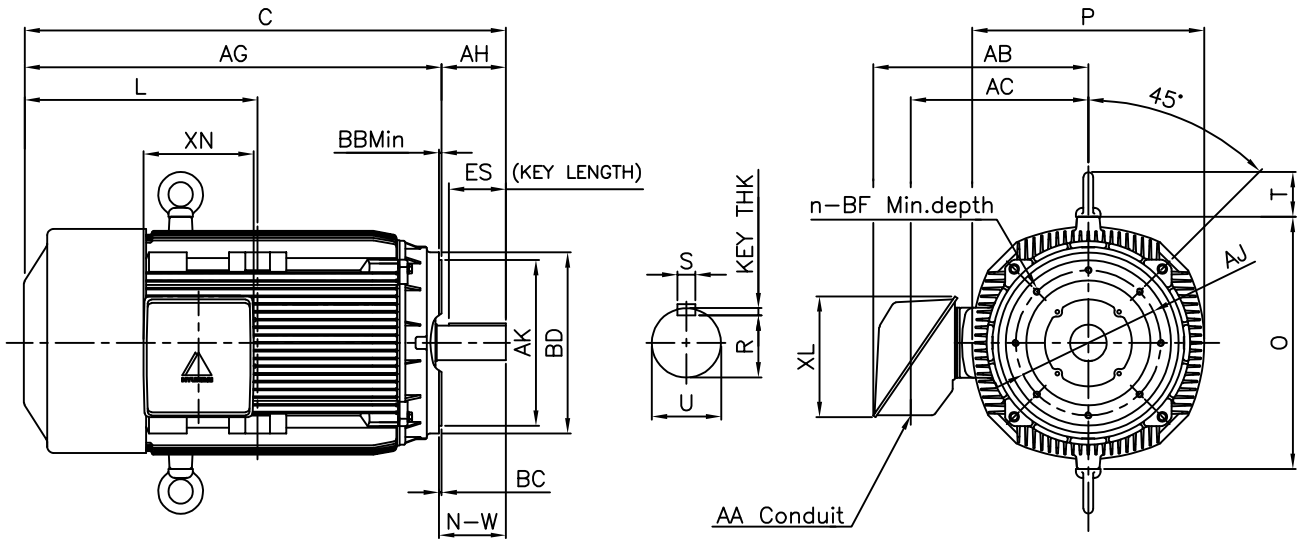


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							

IEEE841



DIMENSIONS

Unit : inch

C - FLANGE									CONDUIT BOX					APPROX. WGT.(LB)
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH	AA	AB	AC	XL	XN	
14.00	16.00	0.25	0.25	17.48	5/8-11	0.94	8	8.25	3.00	23.78	18.03	16.30	13.78	2020

O V E R A L L					S H A F T					KEY	BEARING		
C	L	O	P	T	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
								R	ES	S			
50.29	24.30	24.33	22.44	4.33	42.04	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

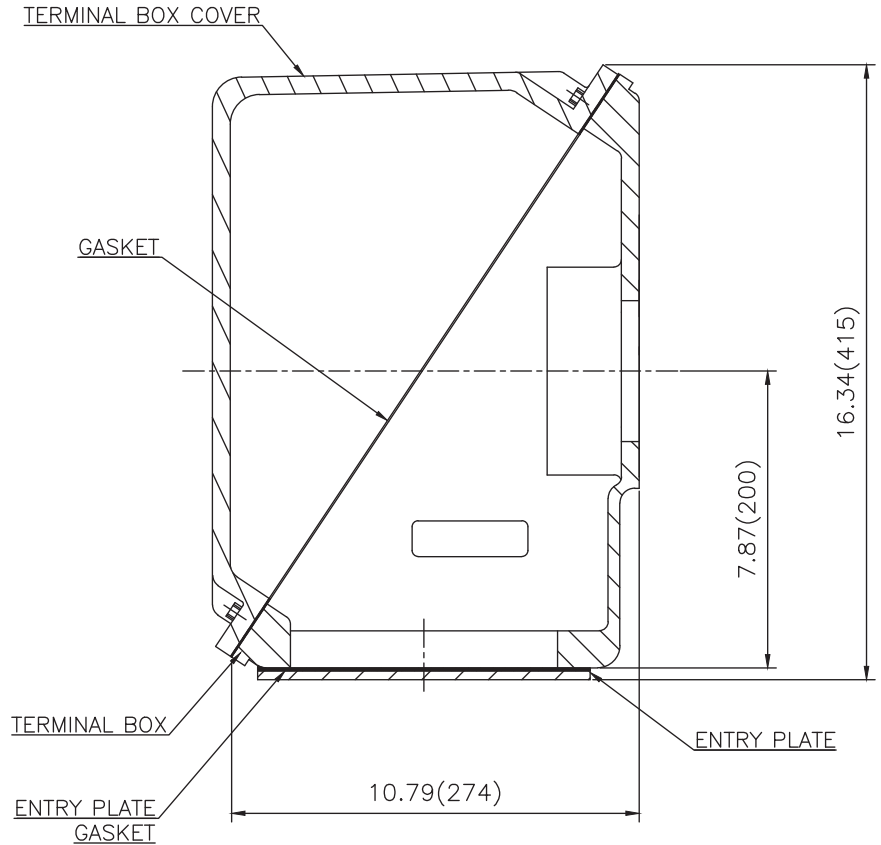
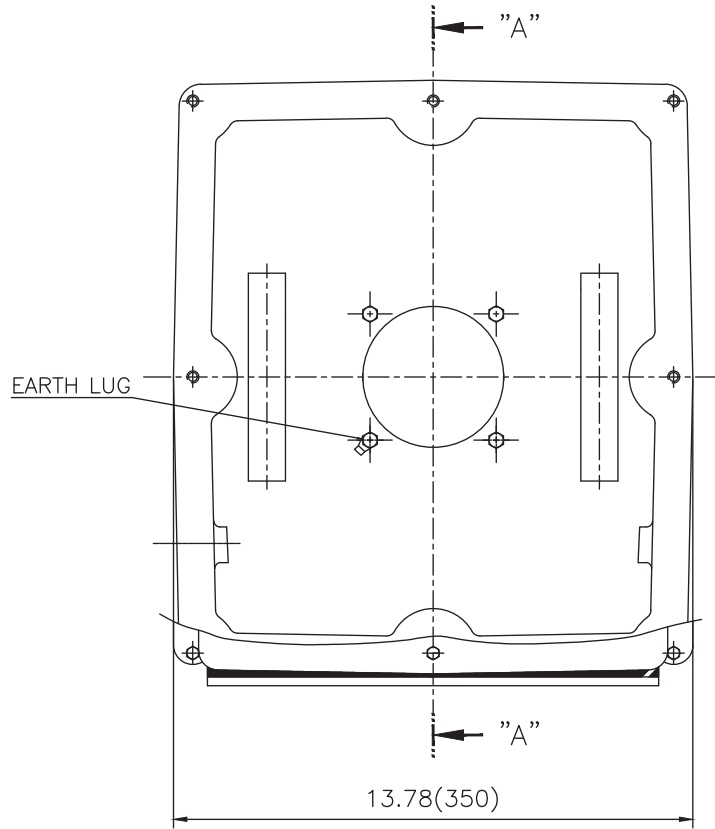
NOTE

- 1.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- 2.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 3.Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC): +0.000inch ~ -0.005inch (324TC-449TC)

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 447TC	DWG SIZE	A4 (1:1)
CHKD BY	R.G.KIM	SCALE	NONE	TITLE	OUTLINE	REF. NO	350A8519AA
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)	DWG NO		LM-11447C5PL001	Sheet No.
DSND BY	H.K.LEE	DATE	2021-04-30			Revision No.	0



Cls. I&II, Div. 2 IEEE 841



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
1-4	±0.1	6-30	±0.5
4-18	±0.2	30-120	±0.8
18-63	±0.3	120-315	±1.2
63-250	±0.5	315-1000	±2.0
250-	±0.8	1000-	±3.0

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. L440 (CAST IRON)	DWG SIZE	A3 (1:3.5)
CHKD BY		SCALE	1/3.5	TITLE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	MAIN TERMINAL BOX ASS'Y			
DSND BY	배승희	DATE	2023-10-19	REF. NO		Sheet No.	of
HD HYUNDAI ELECTRIC				DWG NO	3M-248452	Revision No.	0

